CLAIMS

The following is a complete listing of the claims presently pending in the application:

1. (Previously Presented)   A method of telecommunication over a wide area packet switched network, the method comprising:

sending from a calling party a called number, corresponding to a called party and including an area code, to a first central office connected to a first telephone system;

forwarding the called number from the first central office to a first telephony server, connected to the first telephone system and in communication with the wide area packet switched network, via a signaling channel of the first telephone system;

identifying a second telephony serve, in communication with the wide area packet switched network and serving said called party in a second telephone system, from a routing and administration database by using at least said area code;

sending the called number from the first telephony server to the second telephony server via said wide area packet switched network;

allocating a resource on the wide area packet switched network sufficient to provide a guaranteed level of service through the wide area packet switched network; and

selectively establishing a communication link, via the resource at at least the guaranteed level of service, between the first telephony server and the second telephony server through the wide area packet switched network, to establish communication between the calling and called parties.

2. (Previously Presented)   The method of claim 1, wherein the identifying step comprises:

sending a routing request via the wide area packet switched network from the first telephony server to a routing and administration server having said routing and administration database, the routing request including said area code; and

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receiving from the routing and administration server via the wide area packet switched network a routing response including the identity of said second telephony server and a predetermined communication path corresponding to the second telephony server.

3. (Original)   The method of claim 2, wherein the identifying step further comprises using a second predetermined communication path within said wide area packet switched network to send and receive the routing request and routing response, respectively.

4. (Previously Presented)   The method of claim 2, wherein the routing request includes a calling number of the calling party, the identifying step further comprising obtaining the guaranteed level of service corresponding to the calling number from the routing response.

5. (Previously Presented)   The method of claim 1, wherein the identifying step comprises accessing said routing and administration database within said first telephony server to obtain the identity of said second telephony server and the guaranteed level of service corresponding to the calling party.

6. (Original)   The method of claim 1, wherein the identifying step comprises receiving a network address of the second telephony server on the wide area packet switched network.

7. (Previously Presented)   The method of claim 6, wherein the step of sending the called number from the first telephony server to the second telephony server comprises sending a first signaling data packet carrying the called number as payload data and the second telephony server network address as a destination address to a router selectively routing data packets within the wide area packet switched network, the router sending the first data packet via a predetermined communication path based on the destination address.

8. (Previously Presented) The method of claim 7, wherein the step of sending the called number from the first telephony server to the second telephony server further comprises:

generating a session identifier identifying a call attempt between the calling party and the called party; and

including the session identifier in said first signaling data packet.

9. (Original) The method of claim 8, wherein said selectively establishing step comprises:

receiving a second signaling data packet from the second telephony server including the session identifier and a condition of the called party; and

sending from the first telephony server first traffic data packets having said destination address and carrying digital communication information and said session identifier based on the condition of the called party.

10. (Previously Presented) The method of claim 9, wherein the first traffic data packets sending step comprises outputting the first traffic data packets at least at a minimum data rate according to the guaranteed level of service.

11. (Previously Presented) The method of claim 9, wherein the first traffic data packets sending step comprises:

receiving a third signaling data packet carrying said session identifier and a data rate change request having a value based on traffic along said predetermined communication path; and

outputting the third data packets at a changed data rate based on the received data rate value and in accordance with the guaranteed level of service.

12. (Original)   The method of claim 9, further comprising:

sensing at the first central office a condition of the calling party;

sending to the first telephony server a message indicating the sensed condition of the calling party;

suspending the transmission of said third data packets by said first telephony server in response to the message; and

transmitting from the first telephony server to the second telephony server a third signaling data packet including the session identifier and the condition of the calling party.

13. (Original)   The method of claim 1, further comprising:

receiving at the first telephony server first data packets carrying an identifier for the established communication link and communication samples from the called party via the wide area packet switched network;

forwarding the received communication samples to the first central office on an assigned trunk line based on the identifier; and

supplying the communication samples received on the assigned trunk line from the first central office to the calling party.

14. (Original)   The method of claim 13, wherein the communication samples include at least one of voice samples and data words.

15. (Original)   The method of claim 13, further comprising:

receiving at the first telephony server a second data packet carrying an identifier for the established communication link and signaling information indicating a condition of the called party;

generating a signaling message to the first central office from the first telephony server based on the signaling information; and

in the first central office, initiating a response for the calling party based on the signaling message.

16. (Original)   The method of claim 15, wherein the response initiating step comprises disconnecting the calling party from the communication link.

17. (Original)   The method of claim 1, wherein the selectively establishing step comprises:

setting the communication link along a predetermined communication path within said wide area packet switched network; and

changing a data rate of the communication link based on traffic on the predetermined communication path.

18. (Original)   The method of claim 1, wherein the wide area packet switched network is Internet, the identifying step comprising translating an Internet Protocol (IP) address of the second telephony server from the area code.

19. (Original)   The method of claim 18, wherein the sending step comprises outputting from the first telephony server first packets having the IP address of the second telephony server to a router, the router forwarding the first packets along a predetermined communication path based on the IP address of the second telephony server.

20. (Previously Presented)   A method of telecommunication over a wide area packet switched network, the method comprising:

in a first telephony server connected to a first telephone system, receiving via a wide area packet switched network a first data packet transmitted by a second telephony server of a second telephone system, the first data packet having (1) a destination address corresponding to the first telephony server, (2) a session identifier, and (3) a destination number having an area code served by the first telephony server;

initiating a query by the first telephony server for determining via a signaling communication network of the first telephone system a condition of the destination number from a first central office serving the destination number;

sending a second data packet carrying said session identifier and said condition from the first telephony server to the second telephony server;

allocating at least one network resource to support a guaranteed level of service through the wide area packet switched network; and

selectively establishing a communication link via the resource to provide the guaranteed level of service between the first telephony server and the second telephony server through the wide area packet switched network, to enable communication between the destination number and a station served by the second telephony server.

21. (Original)   The method of claim 20, wherein the selectively establishing step comprises establishing the link on a predetermined communication path in the wide area packet switch network.

22. (Original)   The method of claim 21, wherein the selectively establishing step comprises changing a data rate of the communication link based on traffic on the predetermined communication path.

23 – 27. (Cancelled)

28. (Previously Presented)   The method of claim 20 further comprising initiating a line-sided connection between the first telephony server and the destination number in response to the first central office specifying said condition as an available condition.

29. (Previously Presented)   The method of claim 20, wherein the signaling communication network is a common channel interoffice signaling network.

30. (Previously Presented)   A method of telecommunication over a wide area packet switched network, the method comprising:

sending from a calling party a called number, corresponding to a called party, to a first central office connection to a first telephone system;

forwarding the called number from the first central office to a first telephony server, connected to the first telephone system and in communication with the wide area packet switched network, via a signaling channel of the first telephone system;

identifying a second telephony server, in communication with the wide area packet switched network and serving said called party in a second telephone system, from a routing and administration database by using at least a part of the called number;

generating a session identifier identifying a call attempt between the calling party and the called party;

sending a signaling message from the first telephony server to the second telephony server via said wide area packet switched network, the signaling message comprising the called number and the session identifier; and

communicating a plurality of packets containing audio information between the first and second telephony servers through the wide area packet switched network, to establish telephone communication between the calling and called parties, wherein at least some of the packets containing audio information also contain the session identifier.

31. (Previously Presented)   The method as in claim 30, wherein the step of communicating comprises:

allocating a resource on the wide area packet switched network to communications between the calling party and the called party; and

communicating the packets containing audio information through the wide area packet switched network using the allocated resource.

32. (Previously Presented)   The method as in claim 30, wherein the identifying step comprises:

sending a routing request message via the wide area packet switched network from the first telephony server to a routing and administration server having said routing and administration database, the routing request message including said at least part of the called number; and

receiving from the routing and administration server via the wide area packet switched network a routing response including the identity of said second telephony server and the identity of a predetermined communication path through the wide area packet switched network to the second telephony server capable of providing a guaranteed level of service.

33. (Previously Presented)   The method as in claim 32, wherein:

the routing request message further includes an identification corresponding to the calling party, and

the identifying step further comprises determining the guaranteed level of service based on the identification corresponding to the calling party.

34. (Previously Presented)   The method as in claim 32, wherein the signaling channel of the first telephone system comprises a link from an interoffice signaling network of the first telephone system to the first telephony server.

35. (Previously Presented) A method of telecommunication over a wide area packet switched network, the method comprising:

sending from a calling party a called number, corresponding to a called party, to a first central office connected to a first telephone system;

forwarding the called number from the first central office to a first telephony server, connected to the first telephone system and in communication with the wide area packet switched network;

identifying a second telephony server, in communication with the wide area packet switched network and serving said called party in a second telephone system, from a routing and administration database by using at least part of the called number;

sending the called number from the first telephony server to the second telephony server via said wide area packet switched network;

establishing a communication link between the first telephony server and the second telephony server, wherein the establishing step comprises setting the communication link along a predetermined communication path within said wide area packet switched network; and

communicating telephone information between the calling and called parties via the servers and the predetermined communication path.

36. (Previously Presented)   The method as in claim 35, wherein the setting of the communication link along the predetermined communication path comprises allocating a resource along the path for the communication link, such that the communication link will provide at least a guaranteed minimum level of service throughout the communication of the telephone information.

37. (Previously Presented)   The method as in claim 35, wherein the identifying step comprises:

sending a routing request via the wide area packet switched network from the first telephony server to a routing and administration server having said routing and administration database; and

receiving from the routing and administration server via the wide area packet switched network a routing response including the identity of said second telephony server and an identification corresponding to the predetermined communication path to the second telephony server.